



Atty. Dkt. No. 079328-0107

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: A. Robin POOLE

Title: RATIOS OF COLLAGEN PEPTIDES, THEIR USES AND PRODUCTS

Appl. No.: 10/673,647

Filing Date: 09/30/2003

Examiner: Unknown

Art Unit: Unknown

INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §1.56

Commissioner for Patents
PO Box 1450
Alexandria, Virginia 22313-1450

Sir:

Submitted herewith on Form PTO/SB/08 is a listing of documents known to Applicant in order to comply with Applicant's duty of disclosure pursuant to 37 CFR §1.56. A copy of each listed document is being submitted to comply with the provisions of 37 CFR §1.97 and §1.98.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicant does not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.

TIMING OF THE DISCLOSURE

The listed documents are being submitted in compliance with 37 CFR §1.97(b), before the mailing date of the first Office Action on the merits.

RELEVANCE OF EACH DOCUMENT

All of the documents are in English.

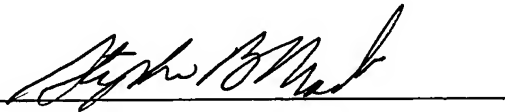
Applicant respectfully requests that any listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP §609.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 CFR §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741.

Respectfully submitted,

Date April 12, 2004

By

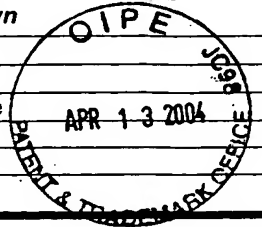


FOLEY & LARDNER LLP
Customer Number: 23533
Telephone: (202) 672-5569
Facsimile: (202) 672-5399

Stephen B. Maebius
Attorney for Applicant
Registration No. 35,264

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Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT Date Submitted: April 12, 2004 (use as many sheets as necessary)				Complete if Known <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Application Number</td> <td>10/673,647</td> </tr> <tr> <td>Filing Date</td> <td>09/30/2003</td> </tr> <tr> <td>First Named Inventor</td> <td>A. Robin Poole</td> </tr> <tr> <td>Group Art Unit</td> <td>Unknown</td> </tr> <tr> <td>Examiner Name</td> <td>Unknown</td> </tr> <tr> <td>Attorney Docket Number</td> <td>079328-0107</td> </tr> </table>		Application Number	10/673,647	Filing Date	09/30/2003	First Named Inventor	A. Robin Poole	Group Art Unit	Unknown	Examiner Name	Unknown	Attorney Docket Number	079328-0107
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U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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FOREIGN PATENT DOCUMENTS								
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		Office ³	Number ⁴	Kind Code ⁵ (if known)				

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	A1	BILLINGHURST, R.C. <i>et al.</i> , "Enhanced Cleavage of Type II Collagen by Collagenases in Osteoarthritic Articular Cartilage," <i>J. Clin. Invest.</i> , vol. 99, no. 7, pp. 1534-45 (1997).	
	A2	DAHLBERG, L. <i>et al.</i> , "Selective Enhancement of Collagenase-Mediated Cleavage of Resident Type II Collagen In Cultured Osteoarthritic Cartilage and Arrest with a Synthetic Inhibitor that Spares Collagenase 1 (Matrix Metalloproteinase 1)," <i>Arthritis Rheum.</i> , vol. 43, no. 3, pp. 673-82 (2000).	
	A3	DODGE, G.R. and POOLE, A.R., "Immunohistochemical Detection and Immunochemical Analysis of Type II Collagen Degradation in Human Normal, Rheumatoid, and Osteoarthritic Articular Cartilages and In Explants of Bovine Articular Cartilage Cultured with Interleukin 1," <i>J. Clin. Invest.</i> , vol. 83; pp. 647-61 (1989).	
	A4	GARNERO P. <i>et al.</i> , "Molecular Basis and Clinical Use of Biochemical Markers of Bone, Cartilage, and Synovium in Joint Diseases," <i>Arthritis Rheum.</i> , vol. 43, no. 5, pp. 673-82 (2000).	

Examiner Signature	Date Considered
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

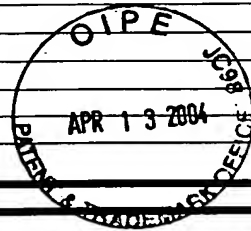
¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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		Examiner Name	Unknown
Sheet	2	of	2
		Attorney Docket Number	079328-0107



NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	A5	HENDERSON, B., EDWARDS, J.C.W., PETTIPHER, E.R. (eds), Mechanisms and Models in Rheumatoid Arthritis, London, Academic Press, (1995)	
	A6	HOLLANDER, A.P. <i>et al.</i> , "Increased Damage to Type II Collagen in Osteoarthritic Articular Cartilage Detected by a New Immunoassay," <i>J. Clin. Invest.</i> , vol. 93, pp. 1722-1732 (1994).	
	A7	In J.C. STEVENSON, RE. Lindsay, (eds), "Biological Markers of Bone Turnover in Osteoporosis," Osteoporosis, pp. 117-136, London, Chapman and Hall, (1998)	
	A8	POOLE A.R., AND HOWELL D.S., Etiopathogenesis of Osteoarthritis. In: <i>Diagnosis and Medical/Surgical Management</i> (3 rd ed.), Moskowitz, R.W. <i>et al.</i> (Eds), pp. 29-37, Philadelphia, Saunders Company (2001)	
	A9	WU, W. <i>et al.</i> , "Sites of Collagenase Cleavage and Denaturation of Type II Collagen in Aging and Osteoarthritic Articular Cartilage and Their Relationship to the Distribution of Matrix Metalloproteinase 1 and Matrix Metalloproteinase 13," <i>Arthritis Rheum.</i> , vol. 46, no.8, pp. 2087-2094 (2002)	

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